Listing of the Claims :

1-15. (Canceled)

16. (Currently amended) An epitaxial growth method of III-V nitrides alloy, comprising:

forming an initial buffer layer on a substrate;

spreading a liquid comprising one or more group III elements and nitrogen on the initial buffer layer by spinning the substrate having the liquid at selected rotation speed to form a thin, spin-coated layer covering the entire initial buffer layer on the ~~a~~ substrate

annealing the spin-coated layer in a gas atmosphere at a temperature equal to or higher than 700°C so as to crystallize the spin-coated layer; and

growing an III-V nitride alloy film on the spin-coated film after said annealing, which is thicker than the spin coated layer and provided that any group III element in the grown III-V nitride alloy film is different from the one or more group III elements of the spin-coated film, wherein lattice constant of the initial buffer layer is between that of the substrate and that of the overgrown III-V alloy film.

17. (Previously Presented) The epitaxial growth method of claim 16, wherein the gas atmosphere comprises nitrogen as an element.

18. (Canceled)

19. (Previously Presented) The epitaxial growth method of claim 17 wherein the gas atmosphere comprises ammonia.

20. (Previously Presented) The epitaxial growth method of claim 17 wherein the gas atmosphere comprises radical nitrogen atoms.

21. (Withdrawn) The epitaxial growth method of claim 16 wherein the spin-coated film is selected from the group consisting of GaN, AlN, InGaN, and AlGaN.

22. (Withdrawn) The epitaxial growth method of claim 16 wherein the substrate is selected from the group consisting of sapphire, SiC, Si, GaAs, InP, GaP, ZnO, MgO, $LiGaO_2$, and $LiAlO_2$.

23. (Previously Presented) The epitaxial growth method of claim 16 wherein the epitaxial III-V nitride alloy film comprises a pn junction.

24. (Previously Presented) The epitaxial growth method of claim 16 wherein the epitaxial III-V nitride alloy film is grown by a method selected from the group consisting of metal organic chemical vapor deposition, molecular beam epitaxy, and hydride vapor phase epitaxy.

25. (Previously Presented) The epitaxial growth method of claim 16 wherein the epitaxial III-V nitride alloy film is grown by a sequential combination of two or more different growth methods selected from the group consisting of metal organic chemical vapor deposition, molecular beam epitaxy, and hydride vapor phase epitaxy.

26. (Withdrawn) The epitaxial growth method of claim 16 wherein the spin-coated film is formed by more than two spin coatings.

27. (Withdrawn) The epitaxial growth method of claim 26 wherein the spin-coated film is formed by more than two cycles of spin coating and annealing.

28. (Withdrawn) The epitaxial growth method of claim 26 wherein the composition ratio varies in the spin-coated film.

29. (Withdrawn) The epitaxial growth method of claim 26 wherein the lattice constant in the spin-coated film is monotonously increased from the substrate to the epitaxial III-V nitrides alloy film.

30. (Withdrawn) The epitaxial growth method of claim 26 wherein the lattice constant in the spin-coated film is monotonously decreased from the substrate to the epitaxial III-V nitrides alloy film.

31. (Original) The epitaxial growth method of claim 16 wherein the substrate has a cover layer on the surface on which the spin coating is applied.

32. (Previously presented) The epitaxial growth method of claim 31 wherein the substrate is silicon covered by silicon carbide.

33. (Previously Presented) The epitaxial growth method of claim 31 wherein the substrate is silicon covered by zinc oxide.

34. (Previously Presented)) An epitaxial growth method of III-V nitrides alloy, comprising:

spreading a liquid comprising a compound having a metal and oxygen on a substrate;

forming a spin-coated layer of the liquid on the substrate by spinning the substrate having the liquid at selected rotation speeds;

annealing the spin coated layer in a gas atmosphere so as to crystallize the spin-coated layer; and

growing an III-V nitride alloy film on the spin-coated film after said annealing.

35. (Previously Presented)) The epitaxial growth method of claim 34, wherein the gas atmosphere comprises oxygen as an element.

36. (Canceled)

37. (Previously Presented) The epitaxial growth method of claim 35 wherein the gas atmosphere comprises H_2O gas.

38. (Previously Presented) The epitaxial growth method of claim 35 wherein the gas atmosphere comprises O_2 gas.

39. (Previously presented) The epitaxial growth method of claim 34 wherein the spin-coated film is selected from the group consisting of zinc oxide, magnesium oxide, and aluminum oxide.

40. (Original) The epitaxial growth method of claim 34 wherein the substrate is selected from the group consisting of sapphire, SiC, Si, GaAs, InP, GaP, ZnO, MgO, $LiGaO_2$, and $LiAlO_2$.

41. (Previously Presented) The epitaxial growth method of claim 34 wherein the epitaxial III-V nitride alloy film comprises a pn junction.

42. (Previously Presented) The epitaxial growth method of claim 34 wherein the epitaxial III-V nitride alloy film is grown by a method selected from the group consisting of metal organic chemical vapor deposition, molecular beam epitaxy, and hydride vapor phase epitaxy.

43. (Previously Presented) The epitaxial growth method of claim 34 wherein the epitaxial III-V nitride alloy film is grown by a sequential combination of two or more growth methods selected from the group consisting of metal organic chemical vapor deposition, molecular beam epitaxy, and hydride vapor phase epitaxy.

44-47. (Canceled)

48. (Previously Presented) The epitaxial growth method of claim 34 wherein said annealing occurs at a temperature of 700°C or more.

49-50. (Canceled)

51. (Previously Presented) The epitaxial growth method of claim 48 wherein the annealing occurs in a gas atmosphere, wherein the gas comprises oxygen as an element.

52. (Previously Presente) The epitaxial growth method of claim 31 wherein the cover layer is formed by sputtering or CVD.

53. (New) The epitaxial growth method of claim 16, wherein the initial buffer layer is formed by nitridization of sapphire substrate.

54. (New) The epitaxial growth method of claim 16, wherein the initial buffer layer is formed by chemical vapor deposition of SiC film on silicon substrate.

55. (New) The epitaxial growth method of claim 16, wherein the initial buffer layer is formed by RF sputtering of ZnO on sapphire substrate.